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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,466	02/25/2004	Ivan Thrall Smith	8274-020	9331
4678	7590	08/01/2007	EXAMINER	
MACCORD MASON PLLC			CHAPMAN, JEANETTE E	
300 N. GREENE STREET, SUITE 1600				
P. O. BOX 2974			ART UNIT	
GREENSBORO, NC 27402			PAPER NUMBER	
			3635	
MAIL DATE		DELIVERY MODE		
08/01/2007		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/786,466	SMITH, IVAN THRALL	
	<b>Examiner</b>	<b>Art Unit</b>	
	Chapman E. Jeanette	3635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 09 May 2007.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-20,22-43, 45-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-20,22-43,45-48 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.	6) <input type="checkbox"/> Other: _____.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 and 5-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Axsom (6901713) in view of Buergin et al (2884779) and Gebhardt et al (4464877)

Gebhardt et al discloses the first and second building units of occupiable space such as a residential twon home with a two hour first resistance fire rated area separation wall and a thermal insulation layer between the layers of the separation wall; see column 6, lines 26-42 and column 8, lines 59-64.

Gebhardt et al discloses a tying structure connecting the separation wall to the first and to the second unit 11. The tying structure includes a top plate 80 attached to the top edge of the fire resistance rated, area separation wall (frrasw) and a bottom plate attached to the bottom edge of the frrasw. See figures 18 and 19 and corresponding text. The plates are less than 10 feet apart.

Both Buergin and Gebhardt discloses that at least a two inch thick gypsum non-bearing partition will meet the requirements of a two hour fire resistance rating.  
Buergin discloses an interior support structure.

Axsom discloses a fire resistance separation wall having only outer membranes and including a thermal insulation barrier between the outer membranes 28 and 14 in figure 3C. Axsom discloses an outer membrane 28 and 14 on each side of an interior support . the insulation exist between the outer membranes. Axsom includes two structurally independent interior vertical (wallboard panel) support members 12/12" The vertical members are spaced apart. The spacing has been considered a matter of choice depending on the other function characteristics to be imparted in the wall structure. The vertical members include cross bracing 20 at about mid-height of the plurality of vertical members. A physical gap 26 between said structurally independent interior support members. See figure 3A. Element 28 may be stucco or paint which may come in a fire resistant wallboard. One of ordinary skill in the art would have appreciated the type of wallboard commensurate with the intended function and purpose of the support structure.

In view of the above, it would have been obvious to use the separation wall between the two building units having a two hour fire resistance rating with a tying structure between the two unit separation walls to provide an effective separation wall.

Claims 12-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Axsom (6901713) in view of Buergin et al (2884779).

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Axsom discloses an outer membrane 28 and 14 on each side of an interior support . the insulation exist between the outer membranes. Axsom includes two structurally independent interior vertical (wallboard panel) support members 12/12" The vertical members are spaced apart. The spacing has been considered a matter of choice depending on the other function characteristics to be imparted in the wall structure. The vertical members include cross bracing 20 at about mid-height of the plurality of vertical members. A physical gap 26 between said structurally independent interior support members. See figure 3A. Element 28 may be stucco or paint which may come in a fire resistant wallboard. One of ordinary skill in the art would have appreciated the type of wallboard commensurate with the intended function and purpose of the support structure.

JP 07206545 discloses organic thermal insulation is used for excellent insulation, mechanical strength and flame resistance. The type of organic thermal insulation has been considered a matter of choice; the selection of ay one type has not been viewed as critical. No criticality has been shown for using any one type. One of ordinary skill in the art would have appreciated using any type commensurate with the intended function and purpose of the separation wall.

It would have been obvious to one of ordinary skill in the art to modify Axsom to include the organic thermal insulation for excellent insulation, mechanical strength and flame resistance as taught by JP 6545.

Claims 26-27, 29-43 and 45-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Axsom (6901713) in view of Buergin et al (2884779) and Gebhardt et al (4464877) and further in view of JP 6545. The references has been applied in the same manner as described above.

*Applicant's arguments are moot in view of the new ground of rejection.*

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chapman E. Jeanette whose telephone number is 571-

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272-6841. The examiner can normally be reached on Mon.-thursday, 8:30-6:00, every fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RICHARD CHILCOT can be reached on 571-272-6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000



JEANETTE CHAPMAN  
PRIMARY PATENT EXAMINER  
ART UNIT 3635